

Appl. No. 09/732,353
Amdt. Dated June 23, 2004
Reply to Office action of March 24, 2004
Attorney Docket No. P12085-US1
EUS/J/P/04-3133

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-19 (Canceled)

20. (Currently Amended) The system of claim 25 ~~[[19]]~~, wherein the non-transparent communication of data transported as data frames is established on the uplink from the mobile station.

21. (Previously Presented) The system of claim 20, wherein the means for detecting comprising means for calculating a frame checksum for a received data frame.

22. (Previously Presented) The system of claim 21, wherein the quality of the radio transmission is detected in the base station to detect if a data frame is correctly received.

23. (Currently Amended) The system of claim 25 ~~[[19]]~~, wherein the switching arrangement comprises a Mobile Switching Center.

24. (Canceled)

25. (Currently Amended) ~~The system of claim 24, wherein:~~

A mobile communication system supporting communication of data and comprising:

at least one base station, comprising a Base Transceiver Station, connected to a switching arrangement over a connection and using a communication protocol for communication between a mobile station and the switching arrangement, wherein:

Appl. No. 09/732,353
Amdt. Dated June 23, 2004
Reply to Office action of March 24, 2004
Attorney Docket No. P12085-US1
EUS/JIP/04-3133

(a) the connection between the base station and the switching arrangement comprising a Base Station Controller, supporting packet switched non-transparent communication of data transported as data frames at least on the uplink between the Base Transceiver Station and the Base Station Controller;

(b) the base station includes

means for detecting if data frames sent from the mobile station are correctly received over the air interface, and

means for sending only data frames detected as correctly received on to the switching arrangement using the packet switched connection between the base station and the switching arrangement, wherein

(c) the Base Station Controller includes transcoding and adapting means for communication with an interworking function of a mobile switching center which comprises means for building frames for transportation of data; and

the transcoding and adapting means detects if frames received from the mobile switching center contain data and sending only data frames on to the base station.

26. (Currently Amended) The system of claim 25 [[19]], wherein the packet switched communication of data is supported between the base station and the switching arrangement on the downlink.

27-30. (Canceled)

31. (Currently Amended) The method of claim 32 [[29]], further comprising the step of:

performing radio quality measurements in the base station to establish if data frames are correctly received over the air interface from the mobile station.

Appl. No. 09/732,353
Amdt. Dated June 23, 2004
Reply to Office action of March 24, 2004
Attorney Docket No. P12085-US1
EUS/JIP/04-3133

32. (Currently Amended) ~~The method of claim 30, further comprising the step of:~~

A method of transmitting data in a mobile communication system, the method comprising the steps of:

establishing a non-transparent data connection between a mobile station and a switching arrangement, comprising an air interface between the mobile station and a base station and a packet switched connection between the base station and the switching arrangement;

detecting in the base station if data frames sent from the mobile station are correctly received over the air interface and using a frame checksum defined in non-transparent data protocol to establish if the data frames are correctly received;

sending only data frames detected as correctly received on to the switching arrangement using the packet switched connection between the base station and the switching arrangement; and

detecting in the base station if a received time slot from the mobile station is symmetrical, and, only if the time slot is symmetrical, sending data packets over the packet switched connection to the switching arrangement.

33. (Currently Amended) The method of claim 32 [[29]], further comprising the step of:

implementing packet switched transmission on the downlink from the switching arrangement to the base station.

34 - 36. (Canceled)